

**Flood Control Project Maintenance
Levee Inspections****LMA District Cover Sheet****Spring 2012 Levee Inspection Results****Reclamation District No. 1660 Tisdale**

	Spring (March - May)	Summer ** (June - August)	Fall (September - November)	Winter ** (December - February)
* Overall LMA Rating (Fall Only)				

** Non-receipt of Summer or Winter Inspection Reports may effect overall annual rating.

*
SPRING INSPECTIONS: Overall maintenance ratings are not determined for the spring inspection results. Individual maintenance deficiencies are rated using the same criteria in the spring and in the fall.

FALL INSPECTIONS: The overall maintenance rating shown above is based on operation and maintenance deficiencies identified within the attached unit inspection reports.

Comments

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2012 Levee Inspection Results

Reclamation District No. 1660 Tisdale

Waterway			Bank	Unit Miles
Unit No. 01 Sacramento River			Left	3.00
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/27/2012 - 3/27/2012			
DWR Inspector	Bob Duffey			
Accompanied By	Ron Long			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway							Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River							Left	3.00	03/27/2012 03/27/2012	Bob Duffey
LMR No.	Levee Mile		Category	Item	Location	Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1			Earthen Levee	Operations & Maintenance Manuals	LS	A Ma		°	°	13
								°	°	
DWR ID: DWR_RD1660_01_s_2012_13										
2			Earthen Levee	Emergency Supplies & Equipment	LS	A Ma		°	°	14
								°	°	
DWR ID: DWR_RD1660_01_s_2012_14										
3			Earthen Levee	Flood Preparedness & Training	LS	A Ma		°	°	15
								°	°	
DWR ID: DWR_RD1660_01_s_2012_15										
4	0.05	0.05	Earthen Levee	Encroachments	LS	M En	BU : Buildings	39.062643 °	39.062643 °	12
								-121.837857 °	-121.837857 °	Y
DWR ID: DWR_RD1660_01_s_2012_12										
5	0.08	0.10	Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.062208 °	39.061823 °	8
								-121.837889 °	-121.837927 °	Y
DWR ID: DWR_RD1660_01_s_2012_8										
6	1.12	1.43	Earthen Levee	Encroachments	LS	M En	AD : Agricultural Ditch	39.047610 °	39.043622 °	9
								-121.838802 °	-121.836445 °	Y
DWR ID: DWR_RD1660_01_s_2012_9										
7	1.26	1.26	Supplemental	USACE Erosion Survey	WS	M Ma	Inspector Comments: 2009 - Erosion on levee toe where an old cobble site is failing. 2011: Some new minor erosion. [2011 Site ID: SAC_120-6_L]	39.044256 °	39.044330 °	11
								-121.837578 °	-121.837626 °	Y
DWR ID: DWR_RD1660_01_s_2012_11										
8	2.04	2.38	Earthen Levee	Encroachments	LS	M En	AD : Agricultural Ditch	39.037640 °	39.034416 °	1
								-121.828421 °	-121.825698 °	Y
DWR ID: DWR_RD1660_01_s_2012_1										
9	2.42	2.42	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability.	39.034107 °	39.034107 °	2
								-121.825152 °	-121.825152 °	
DWR ID: DWR_RD1660_01_s_2012_2										
10	2.44	2.44	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability.	39.033858 °	39.033858 °	4
								-121.824985 °	-121.824985 °	
DWR ID: DWR_RD1660_01_s_2012_4										
11	2.62	2.62	Earthen Levee	Animal Control	LS	M Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.031520 °	39.031520 °	10
								-121.823420 °	-121.823420 °	Y
DWR ID: DWR_RD1660_01_s_2012_10										
12	2.63	2.63	Earthen Levee	Encroachments	LS	M Ma	EQ : Equipment	39.031405 °	39.031405 °	3
								-121.823403 °	-121.823403 °	Y
DWR ID: DWR_RD1660_01_s_2012_3										
13	2.68	2.71	Earthen Levee	Slope Stability	LS	M Ma	S1 : Repair slope instability.	39.030891 °	39.030436 °	5
								-121.822956 °	-121.822617 °	
DWR ID: DWR_RD1660_01_s_2012_5										

* Location	** Rating	+ Issue Type
LS : Land Side	A : Acceptable	Ma : Maintenance Deficiency
WS : Water Side	M : Minimally Acceptable	Ob : Design & System Obsolescence
CR : Crown	U : Unacceptable	En : Enforcement
	N : Not Inspected/Rated	
	C : Corrected	
	A/W : Acceptable but Monitor & Maintain	

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.00	03/27/2012 03/27/2012	Bob Duffey

Levee Mile Report Line	4
Start Levee Mile	0.05
End Levee Mile	0.05
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the building and fence at the landside toe.

rduffey_s_20120416_569.jpg



Levee Mile Report Line	5
Start Levee Mile	0.08
End Levee Mile	0.10
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of squirrel holes along the slope.

rduffey_s_20120312_471.jpg



Levee Mile Report Line	6
Start Levee Mile	1.12
End Levee Mile	1.43
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the AG ditch along the L/S toe.

rduffey_s_20120312_472.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.00	03/27/2012 03/27/2012	Bob Duffey

Levee Mile Report Line	7
Start Levee Mile	1.26
End Levee Mile	1.26
Location	Water Side
Category	Supplemental
Item	USACE Erosion Survey

USACE 2011 Photo #1

rduffey_s_20120312_474.jpg



Levee Mile Report Line	8
Start Levee Mile	2.04
End Levee Mile	2.38
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of the large ditch along the landside toe.

rduffey_s_20120312_469.jpg



Levee Mile Report Line	11
Start Levee Mile	2.62
End Levee Mile	2.62
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of rodent holes along the L/S slope.

rduffey_s_20120312_473.jpg

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 01 Sacramento River	Left	3.00	03/27/2012 03/27/2012	Bob Duffey

Levee Mile Report Line	12
Start Levee Mile	2.63
End Levee Mile	2.63
Location	Land Side
Category	Earthen Levee
Item	Encroachments

View of equipment along the slope.

rduffey_s_20120312_470.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Unit Cover Sheet

Spring 2012 Levee Inspection Results

Reclamation District No. 1660 Tisdale

Waterway			Bank	Unit Miles
Unit No. 02 Sutter Bypass			Right	9.14
	Spring (March - May)	Summer (June - August)	(September - November) Fall	Winter (December - February)
Unit Maintenance Rating (Fall Only)				
Date of Inspection	3/27/212 - 3/27/2012			
DWR Inspector	Bob Duffey			
Accompanied By	Ron Long			

Summer & Winter Inspections

The Local Maintaining Agency (LMA) is responsible for summer and winter inspections. The LMA is required to submit a report regarding summer and winter inspections to the California Department of Water Resources (DWR).

DWR must be informed on the:

- a) completion of the inspection
- b) any changes other than the results of normal maintenance
- c) corrections to deficiencies noted in this report

If additional items are noted, further documentation of those items must also be submitted.

The LMA should submit this information to DWR using the LMA web application tool available at:

<http://cdec.water.ca.gov/lma.html>

If the LMA is unable to submit information on this webpage, please contact DWR for assistance.

The LMA should submit the information and any associated documentation by September 30 for summer inspections and March 31 for winter inspections.

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway					Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass					Right	9.14	03/27/0212 03/27/2012	Bob Duffey

LMR No.	Levee Mile		Category	Item	* Location	** Rating	Action/Comment	GPS Latitude/Longitude		Issue No.
	Start	End						Start	End	Photo
1			Earthen Levee	Operations & Maintenance Manuals	WS	A Ma		°	°	8
DWR ID: DWR_RD1660_02_s_2012_8										
2			Earthen Levee	Emergency Supplies & Equipment	WS	A Ma		°	°	9
DWR ID: DWR_RD1660_02_s_2012_9										
3			Earthen Levee	Flood Preparedness & Training	WS	A Ma		°	°	10
DWR ID: DWR_RD1660_02_s_2012_10										
4	0.93	0.97	Earthen Levee	Animal Control	LS	A Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.045810 ° -121.748792 °	39.046332 ° -121.749000 °	3 Y
DWR ID: DWR_RD1660_02_s_2012_3										
5	1.55	1.55	Earthen Levee	Animal Control	WS	A Ma	A1 : Exterminate rodents and backfill and compact or grout burrows. Inspector Comments: Beaver holes were repaired by District.	39.054290 ° -121.752319 °	39.054290 ° -121.752319 °	7 Y
DWR ID: DWR_RD1660_02_s_2012_7										
6	1.57	1.61	Earthen Levee	Animal Control	LS	A Ma	A1 : Exterminate rodents and backfill and compact or grout burrows.	39.054595 ° -121.752460 °	39.055170 ° -121.752698 °	4 Y
DWR ID: DWR_RD1660_02_s_2012_4										
7	2.48	2.48	Earthen Levee	Animal Control	LS	C Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.067027 ° -121.757622 °	39.067027 ° -121.757622 °	5
DWR ID: DWR_RD1660_02_s_2012_5										
8	5.07	5.07	Earthen Levee	Animal Control	WS	A Ma	A3 : No rodents visible, but rodent burrows visible; need to backfill and compact or grout burrows.	39.102052 ° -121.774477 °	39.102052 ° -121.774477 °	6 Y
DWR ID: DWR_RD1660_02_s_2012_6										

*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.14	03/27/2012 03/27/2012	Bob Duffey

Levee Mile Report Line	4
Start Levee Mile	0.93
End Levee Mile	0.97
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of rodent holes along the L/S slope.

rduffey_s_20120312_475.jpg



Levee Mile Report Line	5
Start Levee Mile	1.55
End Levee Mile	1.55
Location	Water Side
Category	Earthen Levee
Item	Animal Control

There were beaver holes at the toe of the levee that was repaired by the district.

rduffey_s_20120416_572.jpg



Levee Mile Report Line	6
Start Levee Mile	1.57
End Levee Mile	1.61
Location	Land Side
Category	Earthen Levee
Item	Animal Control

View of rodent holes along the L/S slope.

rduffey_s_20120312_476.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable
M : Minimally Acceptable
U : Unacceptable
N : Not Inspected/Rated
C : Corrected
A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement

**Flood Control Project Maintenance
Levee Inspections**

Levee Inspection Report By Mile - Spring 2012

Reclamation District No. 1660 Tisdale

Waterway	Bank	Unit Miles	Inspection Start/End	Inspector
Unit No. 02 Sutter Bypass	Right	9.14	03/27/0212 03/27/2012	Bob Duffey

Levee Mile Report Line	8
Start Levee Mile	5.07
End Levee Mile	5.07
Location	Water Side
Category	Earthen Levee
Item	Animal Control

View of the rodent holes along the W/S slope.

rduffey_s_20120312_477.jpg



*** Location**

LS : Land Side
WS : Water Side
CR : Crown

**** Rating**

A : Acceptable N : Not Inspected/Rated
M : Minimally Acceptable C : Corrected
U : Unacceptable A/W : Acceptable but Monitor & Maintain

+ Issue Type

Ma : Maintenance Deficiency
Ob : Design & System Obsolescence
En : Enforcement